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Dkt. 57155-AA/JPW/ANX

1646  
#8/B  
DmJ  
10-29-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Christophe P.G. Gerald, et al. Examiner: J. F. Murphy

Serial No.: 09/866,248

Group Art Unit: 1646

Filed : May 25, 2001

For : DNA Encoding Mammalian Neuropeptide FF (NPFF) Receptors

1185 Avenue of the Americas  
New York, New York 10036  
October 15, 2002

Assistant Commissioner For Patents  
Washington, D.C. 20231

Sir:

COMMUNICATION IN RESPONSE TO SEPTEMBER 13, 2002 OFFICE  
COMMUNICATION AND RAW SEQUENCE LISTING ERROR REPORT

This Communication is submitted in response to the September 13, 2002 Office Communication and Raw Sequence Listing Error Report issued by the United States Patent and Trademark Office in connection with the above-identified application. A copy of the Office Communication and Raw Sequence Listing Error Report is attached hereto as **Exhibit A**. The Office Communication provides a period of one month for filing a response. A response to this September 13, 2002 Office Communication is due on October 13, 2002. However, since October 13, 2002 falls on a Sunday, a response filed on the next succeeding day which is not a Saturday, Sunday or Federal Holiday, i.e. Tuesday, October 15, 2002, is considered timely filed under 37 C.F.R. §1.7. Accordingly, this Communication is being timely filed.

The Office Communication indicates that the Communication filed August 10, 2001 is not fully responsive to the Office Communication mailed March 5, 2001 because the application does not fully comply with 37 C.F.R. 1.821 - 1.825.

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Applicants: Christophe P.G. Gerald, et al.  
Serial No.: 09/866,248  
filed: May 25, 2001

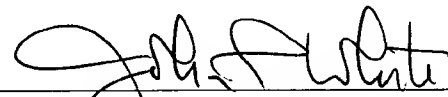
TECH CENTER 1600/2900

In response, applicants submit as **Exhibit B** hereto a corrected paper copy of the sequence listing which comply with 37 C.F.R. 1.821 - 1.825. Applicants also submit herewith a corrected formatted diskette containing a sequence listing in a computer readable form (CRF) as required by 37 C.F.R. §1.825(e). Further, applicants submit herewith a Statement in accordance with 37 C.F.R. §1.821(f) as **Exhibit C**, certifying that the computer readable form containing the nucleic acid and/or amino acid sequences as required by 37 C.F.R. §1.821(e) contains the same information which was submitted as the "Sequence Listing" and contains no new matter.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorney invite the Examiner to telephone him at the number provided below.

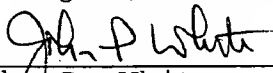
No fee is deemed necessary in connection with the filing of this Communication. If any other fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,



John P. White  
Registration No. 28,678  
Attorney for Applicants  
Cooper & Dunham LLP  
1185 Avenue of the Americas  
New York, New York 10036  
(212) 278-0400

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner For Patents, Washington, D.C. 20231.

 10/15/02  
\_\_\_\_\_  
John P. White Date  
Reg. No. 28,678



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,248	05/25/2001	Christophe P.G. Gerald	1795/57155-AA JPW/BJA	6169

7590 09/13/2002  
John P. White  
Cooper & Dunham LLP  
1185 Avenue of the Americas  
New York, NY 10036

EXAMINER

MURPHY, JOSEPH F

ART UNIT PAPER NUMBER

1646

DATE MAILED: 09/13/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

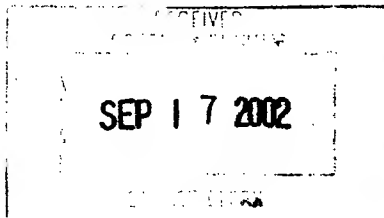
Address: ASSISTANT COMMISSIONER FOR PATENTS

Washington, D.C. 20231

APPLICATION NO. CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
--------------------------------	-------------	---	---------------------

9/13/2002

1<sup>st</sup> Mo: 10/13/2002  
2<sup>nd</sup> Mo: 11/13/2002  
3<sup>rd</sup> Mo: 12/13/2002  
4<sup>th</sup> Mo: 1/13/2003  
5<sup>th</sup> Mo: 2/13/2003  
6<sup>th</sup> Mo: 3/13/2003



EXAMINER

ART UNIT

PAPER

7

DATE MAILED:

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

**Sequence Rules**

The communication filed 8/10/2001 is not fully responsive to the Office communication mailed 3/5/2001 because the Application does not fully comply with 37 CFR 1.821-1.825. The sequence presented in claim 1 does not appear in the Sequence Listing. Applicant must comply with the requirements of the sequence rules (37 CFR 1.821 - 1.825) before the application can be examined under 35 U.S.C. §§ 131 and 132.

Since the reply appears to be bona fide attempt to comply with the requirements of the sequence rules (37 CFR 1.821 - 1.825), applicant is given a TIME PERIOD of ONE (1) MONTH from the mailing date of this communication within which to correct the deficiency so as to comply with the sequence rules (37 CFR 1.821 - 1.825) in order to avoid abandonment of the application under 37 CFR 1.821(g). EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

**Advisory Information**

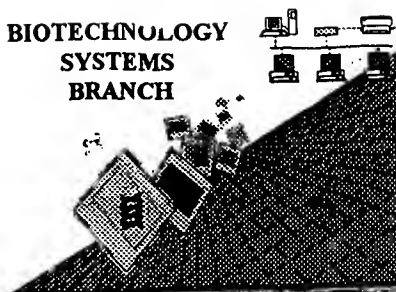
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph F. Murphy whose telephone number is 703-305-7245. The examiner can normally be reached on M-F 7:30-5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 703-308-6564. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-308-0294 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Joseph F. Murphy, Ph. D.  
Patent Examiner Art Unit 1646  
September 11, 2002

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# **RAW SEQUENCE LISTING** **ERROR REPORT**

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



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#6

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/866,248

Source: O/P E

Date Processed by STIC: 6/19/2001

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.**

**FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.**

**PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:**

## **Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

**Checker Version 3.0 can be down loaded from the USPTO website at the following address:**

**<http://www.uspto.gov/web/offices/pac/checker>**

NOV 13 2001

# Raw Sequence Listing Error Summary

TECH CENTER 1600/2900

## ERROR DETECTED      SUGGESTED CORRECTION

SERIAL NUMBER: 09/866248

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics      The number/text at the end of each line "wrapped" down to the next line. This may occur if your file  
     Wrapped Aminos      was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will  
     prevent "wrapping."
- 2      Invalid Line Length      The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3      Misaligned Amino      The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers;  
     Numbering      use space characters, instead.
- 4      Non-ASCII      The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please  
     ensure your subsequent submission is saved in ASCII text.
- 5      Variable Length      Sequence(s)      contain n's or Xaa's representing more than one residue. Per Sequence Rules,  
     each n or Xaa can only represent a single residue. Please present the maximum number of each  
     residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6      PatentIn 2.0      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid  
     "bug"      sequences(s)     . Normally, PatentIn would automatically generate this section from the  
     previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to  
     the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for  
     Artificial or Unknown sequences.
- 7      Skipped Sequences      Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
     (OLD RULES)      (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
     (i)      SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
     (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
     This sequence is intentionally skipped  
     Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8      Skipped Sequences      Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence.  
     (NEW RULES)      <210> sequence id number  
     <400> sequence id number  
     000
- 9      Use of n's or Xaa's      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
     (NEW RULES)      Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
     In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10      Invalid <213>      Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or  
     Response      scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or  
     is Artificial Sequence
- 11      Use of <220>      Sequence(s)      missing the <220> "Feature" and associated numeric identifiers and responses.  
     Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or  
     "Unknown." Please explain source of genetic material in <220> to <223> section.  
     (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12      PatentIn 2.0      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,  
     "bug"      resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence  
     listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

NOV 13 2001

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## RAW SEQUENCE LISTING

DATE: 06/19/2001

PATENT APPLICATION: US/09/866,248

TIME: 12:31:16

Input Set : A:\57155A.txt

Output Set: N:\CRF3\06192001\I866248.raw

p.6  
Does Not Comply  
Corrected Diskette Needed

5 <110> APPLICANT: Gerald, Christophe P.G.  
7 Jones, Kenneth A.  
9 Bonini, James A.  
11 Borowsky, Beth  
15 <120> TITLE OF INVENTION: DNA Encoding Mammalian Neuropeptide FF (NPFF) Receptors  
17 and Uses Thereof  
21 <130> FILE REFERENCE: 1795/57155-A  
C--> 25 <140> CURRENT APPLICATION NUMBER: US/09/866,248  
C--> 27 <141> CURRENT FILING DATE: 2001-05-25  
31 <150> PRIOR APPLICATION NUMBER: 09/161,113  
33 <151> PRIOR FILING DATE: 1998-09-25  
37 <160> NUMBER OF SEQ ID NOS: 42  
41 <170> SOFTWARE: PatentIn Ver. 2.0 - beta  
45 <210> SEQ ID NO: 1  
47 <211> LENGTH: 1410  
49 <212> TYPE: DNA  
51 <213> ORGANISM: Rattus norvegicus  
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59 ggagcagaca gtatggaggg ggagccctcc cagcctccca acggcagctg gcccctgggt 120  
61 cagaacggga gtgatgtgga gaccagcatg gcaaccagcc tcaccttctc ctccctactac 180  
63 caacactcct ctccggtggc agccatgttc atcgcgccct acgtgtcat ctctctctc 240  
65 tgcattggtg gcaacaccct ggtctgttc attgtgtca agaaccggca catgcgcact 300  
67 gtcaccaaca tgtttatct caacctggcc gtcagcgacc tgctggtgg catcttctgc 360  
69 atgcccacaa cccttggtga caaccttacc actggttgcc cttttgacaa cgccacatgc 420  
71 aagatgagcg gcttggtgca gggcatgtcc gtgtctgcat cggttttcac actggtggcc 480  
73 atcgctgtgg aaaggttccg ctgcatcgtg caccctttcc gcgagaagct gacccttcgg 540  
75 aaggcgctgt tcaccatgcg ggtgatctgg gctctggcgc tgctcatcat gtgtccctcg 600  
77 gcggtcactc tgacagtcac ccgagaggag catcacttca tgctggatgc tcgtaaccgc 660  
79 tctaccgcgc tctactcgtg ctgggaggcc tggcccagaga agggcatgcg caaggtctac 720  
81 accgcggtgc tcttcgcgca catctacctg gtgcgctgg cgtcatcgt agtgatgtac 780  
83 gtgcgcatcg cgcgcaagct atgccaggcc cccggtcctg cgcgcgacac ggaggaggcg 840  
85 gtggccgagg gtggccgcac ttcgcgcctg agggcccgcg tggtgacat gctggtcatg 900  
87 gtggcgctct tcttcacgtt gtcttggtg ccactctggg tgctgctgct gctcatcgac 960  
89 tatggggagc tgagcgagct gcaactgcac ctgctgtcgg tctacgcctt ccccttggca 1020  
91 cactggctgg ccttcttcca cagcagcgcc aaccccatca tctacggcta cttcaacgag 1080  
93 aacttccgcc gcggttcca ggtgccttc cgtgcacagc tctgctggcc tccctggggc 1140  
95 gcccacaagc aagcctactc ggagcgggcc aaccgcctcc tgcgcaggcg ggtggtggtg 1200  
97 gacgtgcaac ccagcgactc cggcctgcca tcagagtctg gcccagcag cggggtccca 1260  
99 gggcctggcc ggtgccaact gcgcaatggc cgtgtggccc atcaggatgg cccgggggaa 1320  
101 gggccaggct gcaaccacat gccctcacc atcccgccct ggaacatttg aggtggtcca 1380  
103 gagaaggag ggccagtagt cctgtggccc 1410  
107 <210> SEQ ID NO: 2  
109 <211> LENGTH: 432  
111 <212> TYPE: PRT  
113 <213> ORGANISM: Rattus norvegicus  
117 <400> SEQUENCE: 2

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/866,248

DATE: 06/19/2001

TIME: 12:31:16

Input Set : A:\57155A.txt

Output Set: N:\CRF3\06192001\I866248.raw

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121 1 5 10 15
125 Gln Asn Gly Ser Asp Val Glu Thr Ser Met Ala Thr Ser Leu Thr Phe
127 20 25 30
131 Ser Ser Tyr Tyr Gln His Ser Ser Pro Val Ala Ala Met Phe Ile Ala
133 35 40 45
137 Ala Tyr Val Leu Ile Phe Leu Leu Cys Met Val Gly Asn Thr Leu Val
139 50 55 60
143 Cys Phe Ile Val Leu Lys Asn Arg His Met Arg Thr Val Thr Asn Met
145 65 70 75 80
149 Phe Ile Leu Asn Leu Ala Val Ser Asp Leu Leu Val Gly Ile Phe Cys
151 85 90 95
155 Met Pro Thr Thr Leu Val Asp Asn Leu Ile Thr Gly Trp Pro Phe Asp
157 100 105 110
161 Asn Ala Thr Cys Lys Met Ser Gly Leu Val Gln Gly Met Ser Val Ser
163 115 120 125
167 Ala Ser Val Phe Thr Leu Val Ala Ile Ala Val Glu Arg Phe Arg Cys
169 130 135 140
173 Ile Val His Pro Phe Arg Glu Lys Leu Thr Leu Arg Lys Ala Leu Phe
175 145 150 155 160
179 Thr Ile Ala Val Ile Trp Ala Leu Ala Leu Leu Ile Met Cys Pro Ser
181 165 170 175
185 Ala Val Thr Leu Thr Val Thr Arg Glu Glu His His Phe Met Leu Asp
187 180 185 190
191 Ala Arg Asn Arg Ser Tyr Pro Leu Tyr Ser Cys Trp Glu Ala Trp Pro
193 195 200 205
197 Glu Lys Gly Met Arg Lys Val Tyr Thr Ala Val Leu Phe Ala His Ile
199 210 215 220
203 Tyr Leu Val Pro Leu Ala Leu Ile Val Val Met Tyr Val Arg Ile Ala
205 225 230 235 240
209 Arg Lys Leu Cys Gln Ala Pro Gly Pro Ala Arg Asp Thr Glu Glu Ala
211 245 250 255
215 Val Ala Glu Gly Arg Thr Ser Arg Arg Arg Ala Arg Val Val His
217 260 265 270
221 Met Leu Val Met Val Ala Leu Phe Phe Thr Leu Ser Trp Leu Pro Leu
223 275 280 285
227 Trp Val Leu Leu Leu Leu Ile Asp Tyr Gly Glu Leu Ser Glu Leu Gln
229 290 295 300
233 Leu His Leu Leu Ser Val Tyr Ala Phe Pro Leu Ala His Trp Leu Ala
235 305 310 315 320
239 Phe Phe His Ser Ser Ala Asn Pro Ile Ile Tyr Gly Tyr Phe Asn Glu
241 325 330 335
245 Asn Phe Arg Arg Gly Phe Gln Ala Ala Phe Arg Ala Gln Leu Cys Trp
247 340 345 350
251 Pro Pro Trp Ala Ala His Lys Gln Ala Tyr Ser Glu Arg Pro Asn Arg
253 355 360 365
257 Leu Leu Arg Arg Arg Val Val Val Asp Val Gln Pro Ser Asp Ser Gly
259 370 375 380
263 Leu Pro Ser Glu Ser Gly Pro Ser Ser Gly Val Pro Gly Pro Gly Arg

```



## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/866,248

DATE: 06/19/2001

TIME: 12:31:16

Input Set : A:\57155A.txt

Output Set: N:\CRF3\06192001\I866248.raw

```

265 385          390          395          400
269 Leu Pro Leu Arg Asn Gly Arg Val Ala His Gln Asp Gly Pro Gly Glu
271          405          410          415
275 Gly Pro Gly Cys Asn His Met Pro Leu Thr Ile Pro Ala Trp Asn Ile
277          420          425          430
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291 <211> LENGTH: 200
293 <212> TYPE: DNA
295 <213> ORGANISM: Homo sapiens
299 <400> SEQUENCE: 3
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303 gccaccccg gctacaaacct caccttctcc tcctactatc agcacacctc ccctgtggcg 120
305 gccatgttca ttgtggccta tgcgtcctc ttctgtctct gcatgggtgg caacaccctg 180
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315 <212> TYPE: PRT
317 <213> ORGANISM: Homo sapiens
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325 1          5          10          15
329 Thr Asn Thr Glu Ala Thr Pro Ala Thr Asn Leu Thr Phe Ser Ser Tyr
331          20          25          30
335 Tyr Gln His Thr Ser Pro Val Ala Ala Met Phe Ile Val Ala Tyr Ala
337          35          40          45
341 Leu Ile Phe Leu Leu Cys Met Val Gly Asn Thr Leu Val Cys Phe Ile
343          50          55          60
347 Val Leu
349 65
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365 <400> SEQUENCE: 5
367 gccgacaggg ctgcgcggga gaggttcctc atgaatgaga aatgggacac aaactcttca 60
369 gaaaactggc atcccatctg gaatgtcaat gacacaaagc atcatctgta ctcatatatt 120
371 aatattacct atgtgaacta ctatcttcac cagcctcaag tggcagcaat cttcattatt 180
373 tcctactttc tgatcttctt tttgtgcatg atgggaaata ctgtggtttg ctttatttga 240
375 atgaggaaca aacatatgca cacagtcact aatctcttca tcttaaacct ggccataagt 300
377 gatttactag ttggcatatt ctgcatgcct ataacctgc tggacaatat tatagcagga 360
379 tggccatttg gaaacacgat gtgcaagatc agtggattgg tccagggaat atctgtcgca 420
381 gcttcagttc ttacgttagt tgcaattgct gtagataggt tccagtgtgt ggtctacct 480
383 tttaaaccaa agctcactat caagacagcg tttgtcatta ttatgatcat ctgggtccta 540
385 gccatcacca ttatgtctcc atctgcagta atgttacatg tgcaagaaga aaaatattac 600
387 cgagtggagc tcaactccca gaataaaacc agtccagtct actggtgccg ggaagactgg 660
389 ccaaactcagg aaatgaggaa gatctacacc actgtgctgt ttgccaatat ctacctggct 720
391 cccctctccc tcattgtcat catgtatgga aggattggaa tttcactctt cagggtcgca 780
393 gttcctcaca caggcaggaa gaaccaggag cagtggcacg tgggtgtccag gaagaagcag 840
395 aagatcatta agatgtctct gattgtggcc ctgcttttta ttctctcatg gctgcccctg 900

```

## RAW SEQUENCE LISTING

DATE: 06/19/2001

PATENT APPLICATION: US/09/866,248

TIME: 12:31:16

Input Set : A:\57155A.txt

Output Set: N:\CRF3\06192001\I866248.raw

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399 aacatctaca tctacctttt tgcacactgg ctggcattcg gcaacagcag tgtcaatccc 1020
401 atcatattatg gtttcttcaa cgagaatttc cgccgtgggtt tocaagaagc tttccagctc 1080
403 cagctctgcc aaaaaagagc aaagcctatg gaagcttatg ccctaaaagc taaaagccat 1140
405 gtgctcataa acacatctaa tcagcttgtc caggaatcta catttcaaaa ccctcatggg 1200
407 gaaaccttgc tttataggaa aagtgtgtaa aaaccccaac aggaattagt gatggaagaa 1260
409 ttaaaaagaaa ctactaacag cagtgaagatt taaaaagagc ta 1302
413 <210> SEQ ID NO: 6
415 <211> LENGTH: 420
417 <212> TYPE: PRT
419 <213> ORGANISM: Homo sapiens
423 <400> SEQUENCE: 6
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431 Trp Asn Val Asn Asp Thr Lys His His Leu Tyr Ser Asp Ile Asn Ile
433 20 25 30
437 Thr Tyr Val Asn Tyr Tyr Leu His Gln Pro Gln Val Ala Ala Ile Phe
439 35 40 45
443 Ile Ile Ser Tyr Phe Leu Ile Phe Phe Leu Cys Met Met Gly Asn Thr
445 50 55 60
449 Val Val Cys Phe Ile Val Met Arg Asn Lys His Met His Thr Val Thr
451 65 70 75 80
455 Asn Leu Phe Ile Leu Asn Leu Ala Ile Ser Asp Leu Leu Val Gly Ile
457 85 90 95
461 Phe Cys Met Pro Ile Thr Leu Leu Asp Asn Ile Ile Ala Gly Trp Pro
463 100 105 110
467 Phe Gly Asn Thr Met Cys Lys Ile Ser Gly Leu Val Gln Gly Ile Ser
469 115 120 125
473 Val Ala Ala Ser Val Phe Thr Leu Val Ala Ile Ala Val Asp Arg Phe
475 130 135 140
479 Gln Cys Val Val Tyr Pro Phe Lys Pro Lys Leu Thr Ile Lys Thr Ala
481 145 150 155 160
485 Phe Val Ile Ile Met Ile Ile Trp Val Leu Ala Ile Thr Ile Met Ser
487 165 170 175
491 Pro Ser Ala Val Met Leu His Val Gln Glu Glu Lys Tyr Tyr Arg Val
493 180 185 190
497 Arg Leu Asn Ser Gln Asn Lys Thr Ser Pro Val Tyr Trp Cys Arg Glu
499 195 200 205
503 Asp Trp Pro Asn Gln Glu Met Arg Lys Ile Tyr Thr Thr Val Leu Phe
505 210 215 220
509 Ala Asn Ile Tyr Leu Ala Pro Leu Ser Leu Ile Val Ile Met Tyr Gly
511 225 230 235 240
515 Arg Ile Gly Ile Ser Leu Phe Arg Ala Ala Val Pro His Thr Gly Arg
517 245 250 255
521 Lys Asn Gln Glu Gln Trp His Val Val Ser Arg Lys Lys Gln Lys Ile
523 260 265 270
527 Ile Lys Met Leu Leu Ile Val Ala Leu Leu Phe Ile Leu Ser Trp Leu
529 275 280 285
533 Pro Leu Trp Thr Leu Met Met Leu Ser Asp Tyr Ala Asp Leu Ser Pro

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/866,248

DATE: 06/19/2001

TIME: 12:31:16

Input Set : A:\57155A.txt

Output Set: N:\CRF3\06192001\I866248.raw

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535      290      295      300
539 Asn Glu Leu Gln Ile Ile Asn Ile Tyr Ile Tyr Pro Phe Ala His Trp
541 305      310      315      320
545 Leu Ala Phe Gly Asn Ser Ser Val Asn Pro Ile Ile Tyr Gly Phe Phe
547      325      330      335
551 Asn Glu Asn Phe Arg Arg Gly Phe Gln Glu Ala Phe Gln Leu Gln Leu
553      340      345      350
557 Cys Gln Lys Arg Ala Lys Pro Met Glu Ala Tyr Ala Leu Lys Ala Lys
559      355      360      365
563 Ser His Val Leu Ile Asn Thr Ser Asn Gln Leu Val Gln Glu Ser Thr
565      370      375      380
569 Phe Gln Asn Pro His Gly Glu Thr Leu Leu Tyr Arg Lys Ser Ala Glu
571 385      390      395      400
575 Lys Pro Gln Gln Glu Leu Val Met Glu Glu Leu Lys Glu Thr Thr Asn
577      405      410      415
581 Ser Ser Glu Ile
583      420
589 <210> SEQ ID NO: 7
591 <211> LENGTH: 1293
593 <212> TYPE: DNA
595 <213> ORGANISM: Homo sapiens
599 <400> SEQUENCE: 7
601 atggaggggg agccctccca gctcccaac agcagttggc ccctaagtca gaatgggact 60
603 aacactgagg ccaccccggc tacaaacctc acctctctct cctactatca gcacacctcc 120
605 cctgtggcgg ccatgttcat tgtggccta tgcgtcatct tctgtctctg catgggtggg 180
607 aacaccctgg tctgtttcat cgtgctcaag aaccggcaca tgcatactgt caccaacatg 240
609 ttcatcctca acctggctgt cagtgcacct ctgggtgggca tcttctgcat gccaccacc 300
611 cttgtggaca acctcatcac tgggtggccc ttgcacaatg ccacatgcaa gatgagcggc 360
613 ttggtgcagg gcatgtctgt gtcggcttcc gttttcacac tgggtggccat tgcgttgga 420
615 aggttccgct gcatcgtgca ccctttccgc gagaagctga ccctgcgga ggcgctcgtc 480
617 accatcgccg tcatctgggc cctggcgctg ctcatcatgt gtccctcggc cgtcacgctg 540
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625 cgcaagctct gccaggcccc gggcccggcc cccggggggc aggaggctgc ggaccgcga 780
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633 aacagcagcg ccaaccccat catctacggc tacttcaacg agaacttcg ccgcggttc 1020
635 caggccgctt tccgcgccc cctctgccc cgcgcgtcgg ggagccaca ggaggcctac 1080
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641 ctgcggaatg ggcgggtggc tcaccacggc ttgccaggg aagggcctgg ctgctccac 1260
643 ctgccccctc ccatccagc ctgggatata tga 1293
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649 <211> LENGTH: 430
651 <212> TYPE: PRT
653 <213> ORGANISM: Homo sapiens
657 <400> SEQUENCE: 8

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<210> 9

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer/probe

<400> 9

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→ see item 9 on Eva summary sheet

23

<210> 10

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer/probe

<400> 10

avnaadngbrw avannanngg rtt

→ item 9

23

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/866,248

DATE: 06/19/2001

TIME: 12:31:17

Input Set : A:\57155A.txt

Output Set: N:\CRF3\06192001\I866248.raw

L:25 M:270 C: Current Application Number differs, Replaced Application Number  
L:27 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:841 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:9  
L:841 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:9  
L:841 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:863 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:10  
L:863 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:10  
L:863 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10